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ASIA EDITION

First-of-its-kind endogenous fluorescent flower

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Worlds first fluorescent flowers

Singapore: Adelaide-based company, Bioconst, commenced research on its second generation of fluorescent flowers using DNA technology. This could result in in a world first endogenous fluorescent flower. The world flower market is worth at least $36 billion per annum.

Bioconst launched its first product, Galassia Flowers, in February this year and was met with an overwhelming response from the market. The flowers fluoresce after spraying with a fluorescent formulation and illuminating with a proprietary UV LED. The second generation product will improve upon this by eliminating the need for the spray formulation.

The commercial applications are endless including accessories and decorations for weddings, galas and corporate functions. To date there has been significant interest from Asia, the US and Europe, and it is anticipated that a second generation product will only heighten this. New products in the lucrative flower industry are rare and demand a premium.

The work, supported by the State Government through BioSA, will be based at the University of Adelaide's internationally renowned Waite Campus. Professor Mark Tester, VP, Bioconst, and his team will utilise DNA technology to allow a flower to generate its own fluorescent protein, thereby allowing it to fluoresce when placed under a proprietary UV LED.

"We have already laid the groundwork to maximise the success of this project. It has previously proved elusive to other companies but we believe we have found a way to generate a commercially viable fluorescent flower through a combination of good DNA manipulation and new UV LED technologies," said Prof Tester.

Initially the chrysanthemum will be the target flower but other major commercial species will also be developed including lillies and orchids. Future products will also include new illumination devices as well as different colours and patterns of fluorescence.

Dr Jurgen Michaelis, CE, BioSA, said that, "The Waite Campus is a global centre of excellence that has attracted some of the best plant scientists in the world. Bioconst is a great example of what happens when the right environment exists for entrepreneurs, ultimately companies like this will contribute to the growth of the State's economy."